
Field Investigation

Suspected Yellow Fever

Epidemic

CDC
Centers for Disease
Control and
Prevention

When Informed of Suspected Yellow Fever Cases

- **Review reports of suspected cases**
 - do they meet the case definition?
 - are they clinically consistent with YF?
- **Alert nearby health facilities**
 - have they seen cases?
 - remind them of clinical presentation and case definitions
- **Send an Investigation Team to the field**
- **Inform the province when there are patients who meet the case definition**

Members of the Investigation Team

- **Clinician and / or epidemiologist**
- **Entomologist or hygienist with mosquito training**
- **Microbiologist or technician from reference laboratory**
- **Driver, community representatives, interpreters, general helpers**

Investigation Team Duties-1

- **Verify the reported YF cases**
- **Investigate new cases to establish the diagnosis**
- **Obtain laboratory specimens**
- **Get and analyze information about cases**
- **Make control recommendations**
- **Report findings**

Investigation Team Duties -2

- Assess the local ability to respond:**
 - are cases being managed properly?**
 - are there enough supplies and staff to take care of the ill? (trained health workers, IV fluids, mosquito bed nets, etc.)**
 - can they reduce vector populations and breeding sites?**
 - can they conduct / cooperate with the vaccination campaign?**

Surveillance Case Definitions

- ***SUSPECTED CASE =***
Sudden onset of fever, followed by jaundice and one or more:
 - bleeding in the mouth
 - black vomitus
 - death

- ***CONFIRMED CASE =***
Suspected case and
 - virus isolation from blood or liver OR
 - positive neutralization or IgM capture

Suspect Possible Yellow Fever

- **Fever with scleral icterus or**
- **Fever with scleral icterus in a patient with a negative malaria smear.**
- **This is an additional case definition that may be used during epidemics (not mandatory)**
- **Less strict definition produces a more accurate case count in epidemics**

Locate Cases on a Map

- **Show the location of:**
 - cases, by date of onset, if possible
 - health facilities
 - roads and transport
- **Show location of forested areas, and known location of vectors, if possible**

Laboratory Confirmation of Yellow Fever

- **Not routine for most laboratories**
- **Identify a reference laboratory in the country**
and / or
- **Arrange for laboratory support with the WHO country
or Regional Representative**
- **Control of YF demands extraordinary resources -
which may not be given until laboratory confirmation
is obtained.**

Analyze Data from Investigation

- **Person**

- **Place**

- **Time**

Analyze Data from Investigation

Person

- How many cases and deaths?
- What is the case fatality rate?
- What are the age-specific and sex-specific attack rates?
- What groups are at highest risk?

Analyze Data from Investigation

Place

- **Where are cases occurring?**
- **Is the outbreak spreading to new areas?**
 - **Are there accessible health facilities in the affected areas?**
- **Show location of cases on maps**
 - **helps follow progress of disease**
 - **helps plan vaccination campaign**

Analyze Data from Investigation

Time

- When did cases and deaths occur?
- Is the number of cases increasing or decreasing?
- Make graphs showing the number of cases over time